

May 8, 1946.

Dear Evelyn,

I have delayed in thanking you for the culture of B/r to see your paper in PNAS. I hope you can send me a reprint at your earliest convenience. Congratulations on a nice piece of work, particularly the ingenuity of your method of double doses. Have you any information on the possibility of the mutation from B/r to B? Have you made any cytological comparisons between B/r and B? I can't think of any other questions that one might presume to ask relevant to your problem.

The strain we have been using (K-12) does not seem to behave in this way. All the mutants in general are survivors of high X-ray doses, ~~xxx~~ (with killing of  $1-10^4$ ) but do not seem to be resistant to ultra-violet. Furthermore, some survivors of a biotinless mutant strain which had been subjected to  $10,000 \text{ ergs/mm}^2$  were no more resistant than the ~~unirradiated~~ unirradiated wild type.

Can you calculate the target volume for the division-inhibitory effect on the B?

We shall probably use this strain for uniformity's sake in our genetic program, which I think I outlined to you. Therefore any data relating to the uv or X-ray response, the biochemical or growth characteristics, to optimal dosages for mutation production, to cytology, etc., would be most gratefully received. If the published curves are not qualified, they provide the most important information. Very sincerely,

Joshua Lederberg